

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6488339
<b>Application Number:</b>	10801208
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2034
<b>Title of Invention:</b>	Methods of manufacturing semiconductor devices having a ruthenium layer via automatic layer deposition
<b>First Named Inventor/Applicant Name:</b>	Kwang-hee Lee
<b>Customer Number:</b>	20792
<b>Filer:</b>	D. Randal Ayers/Jessica French
<b>Filer Authorized By:</b>	D. Randal Ayers
<b>Attorney Docket Number:</b>	5649-1277
<b>Receipt Date:</b>	19-NOV-2009
<b>Filing Date:</b>	16-MAR-2004
<b>Time Stamp:</b>	15:44:34
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	2277
Deposit Account	500220
Authorized User	

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/Message Digest	Multi Part/.zip	Pages (if appl.)

1		5649_1277_IDS.pdf	288298 6465df3852dc10bc66622e51fe29ae0e5513 7dbb	yes	3		
<b>Multipart Description/PDF files in .zip description</b>							
<b>Document Description</b>			<b>Start</b>	<b>End</b>			
Transmittal Letter			1	2			
Information Disclosure Statement (IDS) Filed (SB/08)			3	3			
<b>Warnings:</b>							
<b>Information:</b>							
2	NPL Documents	OA_US_Application_11616406.pdf	585937 f7609104d98be35bb47388312e2fae8298b 49475	no	16		
<b>Warnings:</b>							
<b>Information:</b>							
3	Fee Worksheet (PTO-875)	fee-info.pdf	30019 fce9a24ec528f0920eb22f013a130dfde94d d544	no	2		
<b>Warnings:</b>							
<b>Information:</b>							
<b>Total Files Size (in bytes):</b>				904254			
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b>New Applications Under 35 U.S.C. 111</b>  If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><b>National Stage of an International Application under 35 U.S.C. 371</b>  If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><b>New International Application Filed with the USPTO as a Receiving Office</b>  If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>							